Mrs Hen. G. McCausland

4 & Princes Gardens

London S.W.

ISD

June 25. 07.

48, PRINCE'S GARDENS,
S.W.

Dear Miss Graham-

I fear you will think that I had quite forgotten my promise - (which we met last Summer at Crai Stall) of sending you an autograph of my Brother-in-law, Charles Parsons - but the enclosed will prove that I had not forgotten & I am only sorry

That Thank You
very much for getting what-
you wished -
With kind remembrances.
Believe me
Yours Sincerely -
Agnes L. Parsons.

DSI

HOLEYN HALL,

WYLAM-ON-TYNE.

5 Jan 1901

My dear Clark

Many thanks for your letter
& I will look for you up at
Davis's rooms when we meet
in Town. I am sorry for Lord
Lyo and ask in Lt Salisbury
but it must be difficult to
get stamps both ways

Yours

Ever affectionately

Charles

I shall Stay at the Station Hotel on
Sunday night & go to Heaton Works about 9-30

Yours Sincerely
Charles A. Parsons.

P.S. I will vary or arrange times
to suit you.

DSI

Sir Chas Parsons
Inventor of the Turbine

TELEPHONE
2475 KENSINGTON.

9, HANS MANSIONS,
S.W.

March 12 1913

Dear Hadow

I should be very pleased to see
you on Monday 17th. Naval Architects'
meetings keeps me here till Sunday
then I go North.

I could visit you at our works
at Heaton at any time & would
send one of our cars at your disposal

We are having interesting meetings
of the N.A. and Institute of Metals
Sir William Smith was like a Father
in both these Institutions.

10/6

Dear Sir

I thank you for your
courteous letter of recent
date

Yours faithfully

Marcellus H. Parsons.

BERLIN W. 10
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Carlos Algernon Parsons.

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DSI

Scotsman
10th April 1908.

THE DEVELOPMENT OF THE TURBINE.

COMBINATION SYSTEM FOR SLOW VESSELS.

THE proceedings in connection with the annual conference of the Institution of Naval Architects were resumed yesterday morning at the hall of the Society of Arts, John Street, Adelphi, London—the Earl of Glasgow, the outgoing president, in the chair.

The Hon. C. A. Parsons read a paper by himself and Mr R. J. Walker on "The combination system of reciprocating engines and steam turbines." He said that perhaps the most important field for the combined system of machinery as applied to marine propulsion was for those installations where the designed full speed of the vessel fell below the range suitable for an all turbine arrangement. An all turbine arrangement had not been advocated by his firm for ships where the designed speed fell below fifteen or sixteen knots, excepting in some special cases, such as yachts, and for vessels of moderate or slow speed. The combination system of machinery appeared to be eminently suitable. The development of the combination was already taking place on land, where the exhaust steam from non-condensing engines, especially the winding engines at collieries and rolling and mill engines, was being utilised in low pressure condensing turbines. In most cases the power of the plant was doubled without any further consumption of fuel.

Sir William White, in a statement which, in his absence, was read by the secretary, expressed the belief that there was a great possibility of a future application of the combined system to cargo steamers and intermediate liners owing to the economy of coal consumption which it effected.

DEVELOPMENT IN USE OF TURBINES.

A paper on the speed trials and service performance of the Cunard turbine steamer Lusitania was read by Mr Thomas Bell. He remarked that in the light of present-day experience the adoption of turbines even on such an immense scale appeared very different to what it did in the summer of 1903, and too much praise could not be awarded to the late Lord Inverclyde for his courage and foresightedness in this as well as in many other matters, and also to the Cunard Board and their technical adviser, Mr James Bain, for so heartily supporting and furthering his progressive views. The largest turbines then constructed by the turbine works were those in the now historic Queen, built by Messrs Denny, the pioneers of turbine-driven merchant vessels, in which the largest unit weighed some thirty-five tons, and to suggest jumping at one bound from a thirty-five ton unit to one of between 400 and 500 tons was most daring. The step had, however, been safely made, and the Hon. C. A. Parsons' genius, backed by sound British workmanship had fully justified the demands made on it, and the confidence placed in the possibilities of his marvellous invention. (Applause.)

Mr Parsons said he did not think it was realised what a great departure the building of these vessels meant. The risks run were exceedingly great. It was in consequence of the performances of the Queen and the Brighton Railway Company's Newhaven and Dieppe boat that the Cunard Committee, appointed by the late Lord Inverclyde, determined to go in for turbines.

Mr Andrew Laing expressed the opinion that when the Mauretania and the Lusitania and their staffs and crews settled down to their work both vessels would in the no distant future give an even better account of themselves in the way of speed than they had already done. (Hear, hear.)

Admiral Henderson thought the amount of the subsidy given by the Government to the Cunard Company would amply repay them for their enterprise in building these vessels. (Hear, hear.)

LONGITUDINAL FRAMING FOR VESSELS.

At the afternoon meeting the chair was taken by Mr S. J. P. Thearle.

Mr J. W. Isherwood, in a paper on "A New System of Ship Construction," stated that naval architects had for so long recognised the great increase in strength obtained by framing a vessel longitudinally that it was a matter for wonder that some practicable system of longitudinal framing had not been arrived at or hitherto suggested, the advantages being so clear and desirable. In the new method of construction with which his name was associated the closely spaced transverse frames and closely spaced transverse beams, with which they were so familiar were omitted. The transverse strength of the vessel was obtained by fitting directly on the plating a series of strong transverse girder frames and beams at widely spaced intervals, or where transverse bulkheads were fitted for the purpose of subdivision, as in oil steamers for instance, they took the place of such transverses, but it was not essential that bulkheads should be fitted for obtaining the requisite structural strength.

Mr Saxon White said if Mr. Isherwood's method of construction resulted in anything like the saving of material claimed by him it would greatly commend itself to shipbuilders. He welcomed the paper as being a step in the right direction, but there were several points that would require elucidation before they could consider that the author had solved a very interesting problem.

Mr J. E. Scott declared that the system of construction advocated by Mr Isherwood was by no means new. As far back as 1872 he himself read a paper before the Institution in favour of longitudinal framing, and he had since built a vessel on these lines which had answered very well.

Mr Isherwood, in replying, pointed out that there were essential differences between Mr Scott's system and his own.

A discussion followed on a paper by Mr W. Carlile Wallace dealing with the heating of modern ocean liners.

EVENING MEETING.

At the evening meeting the chair was taken by the Hon. C. A. Parsons, and papers by Mr D. B. Morison on "The Influence of Air on Vacuum in Surface Condensers," and by M. Felix F. T. Godard on "The Use of Superheated Steam with Marine Engines" were read. The latter stated that shipbuilders and shipowners might well turn their attention to the question of steam superheaters, as it was likely to remove the only remaining objections to the general use of steam turbines for ocean navigation, a hope that was likely to be fulfilled at no distant date.

The Conference concludes to-day.

"Like other farmers who go in for poultry rearing, we have a system of our own. In the breeding season we have a separate house where we shut off from the other fowls (with a free run in fields) a selected lot of from 15 to 20 pure bred hens of various breeds. These are mated with an equally pure variety. The first cross is found to be preferable to any other, for the fowls are stronger in constitution and prove more reliable stock birds. The White Wyandotte with the Black Minorca hen makes a useful cross—a like result following in the case of the white Leghorn, the favourite old Scottish grey, and the buff Orpington. All these make useful utility fowls.

"Regular feeding is found to be essential to success in poultry farming. In the morning we give the fowls Indian meal and thirds (hot); in the afternoon, oats, wheat, and maize. Care is taken to have the food used up daily. A little variety is provided occasionally—such as oatmeal and potatoes, which form 'a pick' that fowls relish well.

"It is important to have good houses for the fowls, well lighted and ventilated. The poultry should enter from a low door, with box nests and folding doors one tier above another, so that the 'flap doors' may be closed when the eggs are lifted. To keep the nests sweet and fresh they should be renewed occasionally with soft hay. The houses should be cleaned out once a week, after which a few seeds from oats scattered about gives the house a nice, fresh smell. It is most desirable not to overcrowd the henhouses. We have four or five houses for our stock, and a separate house for hatching purposes. We like to have from eighty to a hundred pullets coming forward annually to take the place of old fowls, as birds of the first and second year are found by experience to be the best for egg production. I may add that I have always taken an interest in poultry, and have found through a long course of years that they well repay the care and attention bestowed upon them. Indeed I have often been surprised to witness the slackness of some of our farmers in setting about the development of a branch of rural industry which has reached such huge proportions in other countries."

OUR EGG IMPORTS.

OVER £7,000,000 WORTH IN 1907.

SOME idea of the enormous extent of the opportunities presented for the development of egg-production in Scotland is afforded by the latest official statistics as to the value of such produce annually imported into this country. The following are the returns for the last three years of the declared value of the eggs received from the countries named:—

	1905.	1906.	1907.
RUSSIA	£2,426,029	£2,344,256	£2,392,044
DENMARK	1,634,288	1,701,291	1,774,318
GERMANY	764,966	957,905	1,030,190
BELGIUM	830,593	992,103	891,460
FRANCE...	660,369	623,104	541,088
CANADA...	114,557	106,393	53,084
OTHER COUNTRIES.	381,629	373,070	452,348
TOTAL	£6,812,436	£7,098,122	£7,134,532

A STIRLINGSHIRE POULTRY FARM.

"Home Counties," who in his recently published book, *Townsman's Farm*, writes so vigorously about "the humbug in connection with poultry farming pretensions," can apparently not have extended his investigations to Scotland, or he would have become alive to the fact that there is a poultry farm in Stirlingshire which has been carried on for a number of years with steadily growing success. It belongs to Mr Robert Miller, who began business at The Boards, near Denny, in but a small way some fourteen years ago. When he first started his object was to supply the market with fresh eggs, but he has since developed a large business in eggs for hatching, day-old chickens, and other branches of the industry. In 1906 the output of his chicken hatchery was 16,000 chicks; last year that number was exactly doubled, while the output of eggs for hatching was nearly four times greater than it had been in the previous year. Like our farming correspondent, who to-day writes on the subject of poultry farming, Mr Miller finds that in Scotland poultry keeping is "beginning to occupy as never before the serious attention of the farmer and the cottager." He insists that the Scottish farmer should see to it that he has always about him one or two hundred (or more) young hens of a good laying strain. "No man," he says, "is in a better position to keep his hens in good laying condition, with a small outlay, than the agriculturist, who can raise the most of the food used by his fowls; and if he only bring to his poultry department that shrewd intelligence and experimental sagacity which characterises his general management of the farm, his success is already assured." In a booklet of over fifty pages, Mr Miller offers practical advice as to the feeding, housing, and general management of poultry, which proceeds pretty much on the lines of that given by our correspondent who writes from the experience of more than thirty years.

POULTRY INDUSTRY SPREADING.

Mr Robert Miller, of the Boards, Denny, in his booklet on poultry farming, writes:—

"A great advance in the poultry industry is taking place all the world over—on the Continent, in America, and in the United Kingdom. Hitherto it has been an almost generally accepted axiom that 'poultry-keeping does not pay'—the thrifty and industrious hen has been too often termed a

June 29th 1901 — 1st Voyage
The "King Edward" on the 27th
& 28th Oct. 1st Return Trip

THE TURBINE STEAMER KING EDWARD.

THE new turbine steamer King Edward, widely regarded as marking the commencement of a revolution in the propulsion of mercantile shipping, went her official trial trip on the Clyde yesterday. It may be recalled that the vesel was launched on the 16th of last month from Messrs Denny & Brothers' yard, at Dumbarton, and was then fully described. On her speed trials earlier this week, under ordinary steam, the vessel developed a speed of 20½ knots per hour, equivalent to 24 land miles, thus considerably outstripping the fastest of the present Clyde passenger steamers, for which service she is intended between Greenock and Campbeltown. When the vessel left the Tail of the Bank yesterday forenoon, she had on board a considerable company of gentlemen, mostly connected with the owning and management of shipping, and deeply interested in the performances of the vessel. Fine weather prevailed, and the trip was made under most favourable conditions. Most of the forenoon was devoted to manœuvring in the firth, and calling at one or two of the piers to demonstrate the facility with which the new vessel could be handled, and in all respects she appeared to be give complete satisfaction. In Rothesay Bay the Shamrock I. was passed at anchor, and later Shamrock II. in tow of the Erin was passed. The latest challenger received a hearty cheer. About one o'clock the King Edward was headed for Campbeltown, and off Lochranza she came up with the Caledonian steamer Duchess of Hamilton, one of the fastest vessels in the Clyde passenger service, which had on board the Congress of the Institution of Naval Architects. Both vessels put on full steam. As the King Edward quickly drew level and went flying ahead there was loud cheering on both vessels, and the band on the excursion steamer struck a note of humour by starting up, "Will ye no come back again?"

After this interesting incident, dinner was served. Mr Peter Denny presided.

The Chairman, in proposing success to the vessel, acknowledged the indebtedness of the engineering world to the mechanical skill and the perseverance of Mr Parsons. (Applause.) The fruit of his labour, and the nearest approach to perfection was the King Edward, the first mercantile turbine steamer. (Applause.) They had all seen the steamer and what she could do, taking the piers with ease, showing great speed with marvellous smoothness, and displaying all those qualities that went to make a thoroughly successful steamer. (Applause.)

Captain Leyland replied to the toast. Their critics, he said, had told them that the turbines would not last, that the vessel could not go astern, and that it was quite impossible to take the piers with her. He wished that some of these critics had been on board. They would have had to admit, as he was sure those who were present would, that with a new captain on the bridge they had been able to take the piers at the first attempt, and that in every way the vessel had acquitted herself very successfully. (Applause.) Referring to the slight vibration in the aft saloon, where the company were assembled, he remarked that it was quite possible that in future boats they might put the first-class accommodation forward, where the vibration was totally absent.

Mr Nathaniel Dunlop proposed "The Builders of the King Edward." In the King Edward, he said, they had turned out a steamer of singular beauty, and by their skill, in association with Mr Parsons, they had at the same time a ship of surpassing speed and other qualities. He had been exceedingly impressed with the engine-room. One went into it and asked where was the machinery, and was told there was none. (Laughter.) That was the beauty of the invention—the steamer went without engines. If Mr Parsons' invention could be proved to be a commercial success, then the world would be benefited, Mr Parsons' invention would find a place, and the trade of Great Britain would continue to leap forward as it had always done. (Applause.)

Mr Archibald Denny replied. In conclusion he asked them to drink Mr Parson's health, which was done enthusiastically.

Mr Parsons, in responding, said that although the King Edward was exceedingly interesting as the first commercial vessel to be fitted with turbines, yet in larger vessels there would certainly be greater advantages in the adoption of the system. (Applause.) On land, in driving dynamos the sizes in each succeeding year had grown, and now the largest were about five thousand horse-power. With the increase of size economy had increased, and his company would have no hesitation now in building machinery for an Atlantic liner. (Applause.) In the larger sizes the revolutions would diminish, and there would be at the same time a diminution in the amount of vibration. The slight vibration which they felt in the King Edward arose not from the machinery, but from the blades of the propellers in the water, and it was probable that in future vessels means would be found to still further diminish the small amount which now remained. The Parsons Company had been exceedingly fortunate in being associated with Messrs Denny and with Captain Williamson. The latter, with great enterprise, determination, and foresight approached them at a time when their fortunes seemed at rather a low ebb, and the negotiations culminated in the formation of the syndicate which built the boat. He trusted that the syndicate would be amply rewarded, and that the name of Captain John Williamson, whose health he asked the company to drink, would always be associated with the first turbine steamer. (Applause.)

Captain Williamson, in replying, said that he was quite satisfied that they would be able to run the vessel at a speed of 19 or 20 knots with the economy of a speed of 16 knots. The King Edward started on Monday next on the route between Greenock and Campbeltown, and he had every confidence the vessel would be as great a success as they expected her to be. (Applause.)

Other toasts followed.

Mr Ward, of the builders' firm, in replying to the toast of his health, said it was always safe to take the advice of his namesake, Artemus Ward, and never prophesy unless they knew. So far as the turbine went, however, this much he knew, that the firm were already reserving one or two berths in their yard for turbine steamers which he hoped would be sailing next May or June. (Loud applause.) With regard to Shamrock II., he had seen her at various times in various places and under various circumstances, and he wanted to tell them this much, that within the last few days he, together with several friends, had gone the length of stating and backing their opinion that Shamrock II. was not only a better boat than she had yet got credit for, but if they were of a betting turn of mind in a small way, then put their money on Shamrock II. (Loud applause.)

Campbeltown was reached about four o'clock. In expectation of the vessel a great crowd had assembled at the pier, and they gave her a hearty welcome. After a brief stay the trip was resumed, and the home journey made by way of the Kyles of Bute, Greenock being reached at eight o'clock.

Strachan, parish minister of Kilspindie, write —"It shows the interest your Shilling Fu excites even in very quiet country parishes th two who were absent from a service where th collection was for your Fund have asked me t forward you the enclosed crown and shilling."

Mr A. Wallace, manager of the Spa Hotel Strathpeffer, under date June 27, writes:—

"I have just wired you the sum of £12 for you most deserving, and now most successful, Shilling Fund for the dependents of our officially not too well recompensed soldier lads. The entertainmen at which this sum was most heartily contributed wa given in this hotel last night by a number of the visitors and other skilled vocalists and players; an the concert being good, and the object of it stil better, there was a large audience and much en thusiasm. Everyone was delighted that your Fund had turned out such an unqualified success."

It will be seen that the recital of sacred music in St Cuthbert's Church last night realised £30 for the Fund.

HOUSE-TO-HOUSE COLLECTIONS.

The house-to-house collections continue to improve. Yesterday the amount acknowledged was £118, 6s. 6d.; to-day it is £138, 15s.

BOWLERS AND THE FUND.

The Shilling Fund has already reaped considerable benefit from the tour of the Australian bowlers, whose visit to this country is exciting so much interest. The amount collected at Selkirk, £11, 12s. 6d., was acknowledged yesterday; to-day the "gate" at Galashiels, amounting to £11, 16s., is in the list. The Australians defeated the Edinburgh Braids Club yesterday. This makes their seventh win in the thirteen games they have played. A collection for the Shilling Fund realised over £5. This afternoon at 3.30 the Colonials play a match on the Lutton Place green, when a collection is to be taken for the Shilling Fund. A sum of £4, 3s. comes from Linlithgowshire Bowling Tournament. Mr H. H. Brodie, of the Royal Bank, Portobello, sends £3, 5s., collected by him from the bowlers of the local club The bowlers of Markinch have forwarded £1, 5s.

THE EDINBURGH CYCLE PARADE.

Mr Richard Johnstone, S.S.C., hon. treasurer of the Edinburgh Fancy Dress Cycle Parade, writes under date June 28:—

"Mr A. J. F. Mitchell, the hon. secretary of the Parade, has to-day handed me £4, 8s., being the sum received by him from Mr Moffat, photographer, 125 Princes Street, as proceeds of photographs of prize winners at the Parade, the whole of which Mr Moffat kindly promised to hand over to the Fund. Mr Moffat expects to receive further sums, which will be handed to you through me. In the meantime, I have pleasure in enclosing cheque for £4, 8s., being the amount received from Mr Moffat to-day. I should remind you that Mr Moffat very generously offered to photograph the prize-winners at a reduced figure, and to hand over to the Shilling Fund the entire sums received from those who might accept the offer, and also the proceeds of the sale of their photographs to the public. Every purchase of these photographs, therefore, means an addition to the Fund."

Readers may be reminded that Major Pond's lecture for the Fund on "Stars I have managed and celebrities I have met" takes place this evening in the Music Hall, Edinburgh. All that need be said of the lecture is that if it be only half as amusing and entertaining as Major Pond's recently published book, "Eccentricities of Genius," it will afford a rare hour or two's enjoyment. The musical part of the programme, it need hardly be said, is in good hands. Than Madame Annie Grey no individual vocalist has rendered greater service to the Shilling Fund.

St Boswells has all along taken a kindly interest in the Shilling Fund, and it has had good friends in Messrs W. Ballantyne & Son. Mr W. E. Ballantyne, hon. secretary, sends particulars of a cricket match for the Fund which is to be played at St Boswells to-day between the local club and Kelso. At the interval between the innings of the teams a collection is to be taken for the Shilling Fund. "This," the promoters of the match point out, "will be the last opportunity of subscribing towards this most excellent Fund, which has done so much for the unfortunate widows and orphans of our brave soldiers, who have given up their lives to keep the name of Britain supreme." The match is to begin at three o'clock. St Boswells brass band is to be in attendance.

Captain Shepherd, of No. 8 (Leven) Company 1st Fife Volunteer Artillery, who has rendered excellent service to the Shilling Fund, informs us that a church parade of his corps is to take place to-morrow, when a collection will be made for the Fund.

Mention has already been made of the military tournament and athletic sports organised by the Athletic Club of the Queen's Rifle Volunteer Brigade, the Royal Scots. It is to take place on the 6th July at Powderhall, and two-thirds of the proceeds are to be devoted to the Shilling Fund. A very attractive programme of events has been arranged, and entries have been received for tug-of-war, tent-pegging, and other popular competitions from all parts of the country, the entrants including many well-known corps. It is possible that a musical ride and some artillery work may yet be arranged. Captain James A. Hope is convener of the Athletic Club.

There is to be a collection for the Fund at the Gospel Temperance Demonstration to-night in Carrubbers' Close Mission. The musical programme will include a concert phonograph used by the Hon. Dr James Johnston, of Jamaica in his recent lecturing tour in America.

The "Haddingtonshire Courier" of yesterday, referring to the Fund, writ

MARINE STEAM TURBINES.

Mr Robert Cromie writes on marine steam turbines in the January number of "Longman's Magazine." In the course of it he says:—

When the turbine first went to sea it made a sensation which will not soon be forgotten. Mr Parsen's first venture, the Turbinia, developed a speed far exceeding that of any other vessel afloat. On her trial a speed of thirty-four and a half knots was reached when pushed, and thirty-one knots was no trouble to her. This, however, did not long remain the world's record, for the second turbine boat, the torpedo-boat destroyer Viper, rather easily beat it, by going, at her best speed, over thirty-seven knots, or nearly forty-three statute miles per hour. The Cobra, which followed, was not quite so fast, but altogether it is not too much to say that the speed of these boats fairly astonished the world and stimulated to a marked degree interest in the steam turbine. The last boat, the Cobra, it must be admitted, also established an undesirable precedent by foundering in a heavy gale on September 18, 1901. She was constructed by another firm, but although the disaster could not be charged to the engines, it must have been very disheartening to the Parsons Company. With the King Edward and Queen Alexandra, built by Messrs Denny & Brothers, of Dumbarton, for service on the Clyde, the turbine engine left the region of experiment and entered that of commerce. The King Edward steamed 12,116 knots on a coal consumption of 1429 tons at an average speed of eighteen and a half knots. Another typical river steamer of the same class, but with the ordinary reciprocating engines, steamed 12,106 knots on a coal consumption of 1900 tons and at the same average speed. That speaks well for the first passenger steamer fitted with turbine engines. Quite recently the turbine has been more widely adopted and is giving satisfaction. Two new cross-Channel steamers, built by Messrs Denny for the Dover and Calais and the Newhaven and Dieppe routes, are turbine-engined. At present a large steamer is on order for the Union Shipping Company of New Zealand, one for the Larne and Stranraer service, two for the new Belfast and Heysham route, and a new Allan liner is being built by Messrs Workman, Clark, & Co. (Limited), of Belfast. This vessel is worthy of special note as the first Transatlantic turbine steamer, and it will no doubt have an influence on the deliberations of the Cunard commission which is now considering the advisability of adopting the engine in the two new liners that company has in contemplation. The order for another Allan liner, also turbine-engined, has been placed with Messrs Alexander Stephen & Sons (Limited), of Glasgow. Both these vessels will be 500 feet long, and have a speed of 17 knots. At the moment of writing, it is reported that Messrs Sivewright, Bacon, & Co., of West Hartlepool, have placed an order for two or three cargo turbine steamers, the hulls to be built by Messrs Furness, Withy, & Co., of West Hartlepool, while Messrs Richardsons, Westgarth, & Co. supply the machinery under licence from Messrs Parsons. These vessels will create a good deal of attention, as they will be the first ordinary cargo turbine steamers.

While the turbine has thus been advancing steadily, if not, so far, very rapidly, on its commercial career, it has been making its way in other directions. Already the British Navy has been represented among its patrons by the cruiser Amethyst and the destroyers Velox and Eden. The American Navy Department is asking Congress for a grant to experiment with the engine in a 5000 ton gunboat. Germany is employing it in a sea-going torpedo boat and a small cruiser, the Merkur, of 10,000 horse-power. France is also moving in the matter, and other Governments will no doubt soon fall into line.

ract, unless they can prove, which they have not done, that the said failure was due to some cause for which they are not in law responsible; that the defenders, by holding themselves out to the public and the pursuers as erectors of grand stands, are bound to exercise ordinary care and skill in the erection of such stands, and, in particular, that they were bound to erect the stand in question in such a manner as to be safe for persons using it, and that the failure of the defenders to erect the said stand in such a manner as to be safe for persons using it constituted negligence or fault on their part; and that they are liable to the pursuers in respect of such loss as was directly caused to them thereby. He also finds pursuers entitled to their expenses on the higher scale.

CANADA AND MR CHAMBERLAIN'S PROPOSALS.

COLONEL DENISON, President, British Empire League in Canada, writes to the "Times" from Toronto, under date December 14:—There is one point in connection with Mr Chamberlain's fiscal campaign in Great Britain that has astonished the Canadian people generally.

We have watched with great interest the progress of the movement in favour of preferential tariffs and have been greatly pleased with the spirit Mr Chamberlain has shown and with the wisdom and ability of his speeches; but to most Canadians it has been a revelation to watch the methods of his opponents, and I ask your permission to discuss one feature of their arguments which specially applies to Canada.

Prominent English politicians, men whose names are known in this country as having occupied high positions in the Councils of the Empire, have been openly declaring on public platforms that the colonies are not on Mr Chamberlain's side, and that they would not support him in the policy of preferential tariffs. I shall not speak on behalf of the other colonies; they have been and are showing their sympathy with Mr Chamberlain; but I would like to point out some facts to show what Canada's position has been and really is:—

1. On September 30, 1891, both Houses of the Canadian Parliament passed unanimously an address to the Imperial Government asking them to denounce the German-Belgian treaties, which prevented preferential trade arrangements between the various parts of the British Empire.

2. On April 25, 1892, Mr Alexander M'Neill moved a resolution offering preferential trade with Great Britain, if she would agree to do likewise. This was carried by our Parliament, both sides being in favour of the general principle.

3. In the session of 1897 the Parliament of Canada, with the approval of both sides of the House, actually gave a preference to Great Britain in our markets, which, after the denunciation of the German-Belgian treaties, was increased to 33⅓ per cent., and is continued still, with the result that British exports, which had been steadily diminishing, have in the five years since increased from about £6,000,000 to about £11,000,000 per annum.

4. That the Canadian Parliament, with the approval of both political parties, has granted a tariff preference in favour of West Indian sugar, and on the express ground of our sense of Imperial responsibility.

5. That at the Imperial Conference of 1902, all the colonies passed a resolution in favour of preferential tariffs, and Sir Wilfrid Laurier offered, if Great Britain would reciprocate, to give still further

26th Dec 1906.

THE DEVELOPMENT OF THE STEAM TURBINE.—The reading of a paper by the Hon. G. A. Parsons and R. J. Walker, on the application of the steam turbine to the propulsion of ships has attracted a good deal of general attention. It was not until 1894 that the idea of propelling a vessel by means of the steam turbine was put into practical form. The Turbinia was the first vessel to be fitted with a turbine engine, but the results were far from being satisfactory, a speed of only 18 knots being obtained. After several alterations, however, and the replacement of the orginal turbine by three others, in series, the Turbinia proved a success. Following her came the torpedo-boat destroyers Viper and Cobra, which were built and fitted with turbines for the Royal Navy. They achieved remarkable speed, the Viper taking the position of the fastest vessel in the world. with the phenomenal speed of 36.86 knots, which is about 42 miles per hour. The triumph of these two vessels was short-lived, however, for the Viper ran on the rocks off the Channel Islands in a fog, and ultimately became a wreck, while the Cobra foundered in a storm. Thus the Turbinia was again the only vessel afloat with turbine engines. The marine turbine was first used for commercial purposes in the Clyde steamer King Edward, during the summer of 1901. This vessel was so successful that railway companies and owners of mercantile vessels, who had been reluctant to bear the risk of the first experiment, quickly placed orders for steamers of the turbine type. The commercial advantages of this system over the reciprocating engine were soon clearly demonstrated, and at the present time no less than 31 vessels are in service, representing a total of about 105,000 gross tonnage and 235,000 i.h.p. The development of the marine steam turbine has been slow outside Great Britain, only a few war vessels having been built in Germany and France. The reason for this is probably due to the fact that both in France and Germany several rival systems have been energetically exploited, causing those responsible for the ordering of new vessels to wait until the results obtained clearly proved to them which system was the best. On the other hand, in Great Britain the turbine has now been adopted to drive the largest existing war-ship, the Dreadnought. As to the advantages of the marine turbine over the reciprocating engine, they are many, and can be briefly summarised as follows:—Considerable saving in coal, reduced weight of machinery, steadiness and smoothness of running, reduction in oil and stores, and absence of racing in a seaway.—*Magazine of Commerce.*

attended the Assembly convened by the latter, and it is probable that all the Liberal congregations will give up their own Union and join the Union founded recently at Jarnac.

The outcome of the recent sifting, therefore, is that there will be not three Reformed Churches, but two, the Evangelical majority of the Right will compose the one, and the Liberals plus the Evangelical Centre the other. The first will be a homogeneous, and the second a composite Church. It will be interesting to watch the progress of the latter, and to see whether the Liberal or the Evangelical leaven in it will predominate. Some observers hope that the warm spirit of the ardent young Evangelical element, represented by Pastors Paul and Wilfred Monod, Gounelle, N. Babût, and Boegner, will prevail, by bringing the Liberals into touch with the modern developments of earnest Church life, and that the way may thus be opened up for a fusion by and by with the Evangelical majority. Others fear that the tendency will be all the other way.

As regards the Eglise Libre, which separated from the State in 1848, it holds together for the present, most of its congregations are believed to have affinities with the Synodal Evangelical Church; a few may ultimately join the new Liberal Church; and possibly certain southern congregations may, in the event of a break-up, prefer the Baptist or Plymouthist connection to either of these. The most that we can safely say for the present here again is—*Qui vivra verra.*

C. A. S.

ARCHDUKE'S ROMANCE.

[From To-day's "Daily Telegraph."]

Vienna, December 25.

The romantic love affair of an Austrian Archduke, which some four years ago caused much sensation, has, it appears, ended unhappily.

It will be remembered that the Archduke Leopold Salvator, eldest son of the Grand Duke of Tuscany, and a near relation to the Imperial House, suddenly cut himself loose from all his

AUTOGRAPHE

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Parsons

Sir Charles Algernon

OBSERVATIONS

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882 PARSONS, Sir Charles Algernon, engl. Ingenieur, Erfinder der Dampfturbine, (1854-1931). Postkarte mit 2 eigh. Zeilen m.U., in engl. Sprache, o.O., (7.10.1924). Dankt für den freundlichen Brief. 120.-

Nebehay -67

m.U., o.O., 19.4.1894. "Wer die Gottesgabe der Begeisterung besitzt, der wird wohl älter, aber er wird nicht alt." 150.-

873 OPIZ, Philipp Maximilian, Botaniker, hervorragender Fachschrift-